

ABSTRACT

Some Physical and Mechanical Properties of Plum Fruit (*Prunus cerasifera* Ehrh.) at Different Harvest Periods

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The physico-mechanical properties of agricultural materials and products are necessary for processing, transporting and storing as well as their postharvest process and the design of equipment for harvesting and plantation.

This study aimed to determining the physical and mechanical properties of plums, during different harvest period moisture content, fruit length, width, thickness, geometric mean values of diameter, sphericity, shape index, bulk density, true density, mass, porosity, projection area, and some physical features detachment force compression behavior under load and damage in different situations, such as falls from heights on different surfaces were some of the mechanical properties. Physical and mechanical properties of plums harvest periods are statistically significant differences between them are not identified as a result of the analysis of variance and the variance obtained from the analysis, the determination of the differences stems from the period of harvest which has been in test and Duncan.

As a result of the study; physico-mechanical properties namely, the differences between the moisture content of plums at different harvest periods, fruit length, width, thickness, geometric mean values of diameter, sphericity, shape index, bulk density, true density, mass, porosity, projected area, and some physical features detachment force, compression load falls below the behavior of different heights and different values of damage on the physical and mechanical properties of surfaces were determined as signification the of $p < 0,01$.

Keywords: plum, physical properties, harvest period, mechanical properties,